AYDIN DISPLAYS Inc.

CAMBRIDGE
USERS MANUAL

CFP19 Series Slow Scan

Chassis
Rack Mount
VESA Wall Mount
Plastic Tabletop

LCD Monitor User Guide

Document No. 150-CFP-19SS(-)

SERIES PRODUCTS

CFP19C1-230-00A,B,C,D
CFP19R2-230-00A,B,C,D
CFP19W1-230-00A,B,C,D
CFP19T2-230-00A,B,C,D

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FCC and CE Radiation Statement

FCC

This equipment has been tested and found to comply with limits for Class B digital device pursuant to Part 15 Federal Communications Commission (FCC) rules.

CE

This equipment has been tested and found to comply with the limits of the European Council Directive on the approximation of the law of the member states relating to electromagnetic compatibility (89/336/EEC) according to EN 55022 Class B.

FCC and CE Compliance Statement

These limits are designed to provide reasonable protection against frequency interference in residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed or used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in television reception, which can be determined by turning the equipment off and on. The user is encouraged to try and correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna**
- **Increase the separation between the equipment and the receiver**
- **Connect the equipment into and outlet on a circuit different from that to which the receiver is connected to.**

CAUTION!

The Federal Communications Commission warns the user that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

PRECAUTIONS

Read all of these instructions and save this manual for later use. Follow all warnings and instructions on the product.

1. Do not cover or block the ventilation holes in the enclosure.
2. Do not insert sharp objects or spill liquid into the monitor through the cabinet slots. This may cause accidental fire, electric shock or failure.
3. Unplug the unit when not in use for an extended period of time.
4. Do not attempt to service this product yourself, since opening or removing the cover may expose you to potential electric shock. Only a qualified technician should service this product.
5. Do not touch the screen directly with your fingers as it may damage the screen; the oil from your skin is difficult to remove.
6. Do not apply pressure to the screen, the LCD is very delicate.
7. Keep the monitor away from extreme heat, cold, or humid places.
8. Do not place directly under sunlight, dusty surroundings or near equipment, which may generate strong magnetic fields.

INTRODUCTION

Thank you for choosing this high-quality Flat Panel TFT-LCD Color Monitor. It combines the features of a MONITOR with a THIN FILM TRANSISTOR Liquid crystal display (TFT-LCD). This new generation of TFT-LCD incorporates a high quality display in a lightweight module.

Product Description:

This industrial series LCD Displays is rugged, high performance, Active Matrix color/monochrome TFT LCD monitors designed for those demanding applications that required a rugged, high quality computer display capable of sub-VGA through SXGA resolutions. These premium displays accept broad range of standard of signal formats, enabling it to function in most modern industrial environments. For legacy or replacement applications, this LCD display can be configured to accept a wide variety of sub-VGA formats and video signal inputs. Other options include; touch screen, enhanced sunlight readability, Open Frame configurations, Rack mount configurations, Wall/Arm mount configurations, NEMA 4X stainless steel panel mount bezel and front touch controls, vandal shields. These computer display panels have all the features necessary for use in those industrial, manufacturing, financial, transportation and other severe environments that require bright, crisp computer imaging.

Unlike CRT displays, the LCD panel has a fixed pixel format over a set area. So, for best performance the “native resolution” setting is always recommended.

- **For 19” monitors**: The native resolution of the LCD panel is 1280 X 1024; Recommended resolution is 1280 X 1024 @ 60KHZ or 1024 X 768 @ 60hz.

Package Contents:

Please check the TFT-LCD Monitor Package to make sure it contains the following items:

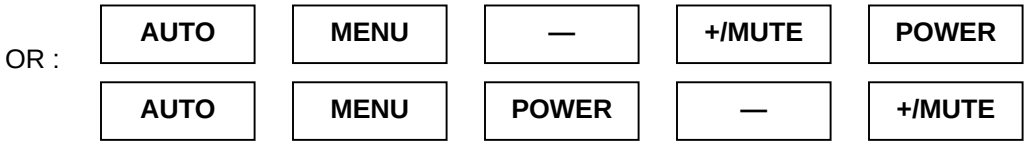
- LCD Monitor
- Power Cord
- DC Adapter
- VGA Cable
- Audio Cable (Optional)
- Users Manual

Menu Control Buttons:

- **POWER**: Power on/off control
- **AUTO**: Automatically adjusts for an optimal image. (Standard : For PC Only Model)
  Changes Input Signal. (Option : For PC+AV Model)
- **MENU**: Selects command function
- **(-)** Decreases value.
  When OSD not on the screen, push “-” for volume adjust.
- **+/MUTE**: Increase value.
  When OSD not on the screen, push “+/MUTE” to enable/disable volume MUTE function.
- **LED**: Power ON: Green Light
  Power Saving or No Signal: Orange Light

Menu Operating Instructions:

Your LCD monitor allows you to easily adjust the characteristics of the image being displayed. All of these adjustments are made using the control buttons on the front of the monitor. While you use these buttons to adjust the controls, the OSD (On Screen Display) shows you their numeric values as they change.



AUTO	1. Auto-adjusts the display for optimal image quality 2. Changes Input Signal (when PC/AV Option).
MENU	1. Opens On Screen Display (OSD) mode. 2. Selects the highlighted function.
POWER	1. Turns the monitor ON/OFF. 2. Indicated power status of the monitor: • Green: Normal Operation. • Orange: Power Saving mode or no signal input. • Black (No light): Power OFF.
(-)	1. Decreases the values of the selected function. 2. Moves the selector light-bar down. 3. When OSD not onscreen, push "-" for volume adjust.
+/MUTE	1. Increases the values of the selected function. 4. Moves the selector light-bar up. 2. When OSD not onscreen, push "+/MUTE" to enable/disable volume mute.

Direct Access Features:

1. Push “Auto” to set display to the optimal image.
2. With the OSD off, push the “MENU” button to display the main OSD menu.
3. Use “+/-“ buttons to select the function, and press the “MENU” button once to activate the selected function.
4. After selecting a function, use the “+/-“ buttons to make necessary adjustments. The setting bar moves and the numeric value indicator changes to reflect your adjustments.
5. Select the “EXIT” icon to return to the main menu to select another function or to exit from the OSD. The new Settings will be automatically saved.
6. **When OSD not on the screen**:
    - Push “-“ to enable volume adjust function.
    - Push “+/MUTE” to enable/disable volume MUTE function.
7. *For PC+AV Model: push “AUTO” to change input signal (PC / CVBS / S-Video).

ON SCREEN DISPLAY (OSD) OPERATION

FUNCTION	DESCRIPTION
AUTO-SETUP	Automatically adjusts for optimum image.
BRIGHTNESS	Adjusts the brightness of the image.
CONTRAST	Adjusts the contrast of the image.
DISPLAY ADJUST	Adjusts the horizontal, vertical, frequency and phase.
COLOR TEMPERATURE	Adjusts the 9300K, 7500K, 6500K, and RGB individual color temperature.
LANGUAGE	Selects OSD language
OSD DISPLAY	Adjusts OSD Display position
VGA / DVI	Selects analog or digital input (Only works on DVI model with DVI Video Card.)
AUDIO	Adjusts Speaker Volume.
RECALL	Resets all functions to factory settings.
EXIT	Automatically Adjusts for optimum image,

- Normally, for VGA analog signal input, after “AUTO SETUP” will achieve the optimal image performance. It is generally not necessary to manual adjust.
- With DVI digital signal input, the “AUTO SETUP” and “DISPLAY ADJUST” function is not necessary. The image performance will depend on your graphic card.

DISPLAY MODES:

1. Set the resolution: Right click on the Windows desktop—choose Properties—choose Settings—set the resolution.
2. Set the refresh rate: See your graphic card’s user guide for instructions.

SPECIFICATION - CFP19 Series 19-inch LCD

Size/Technology	19" TFT Active Matrix LCD
Viewing Area	376.3 mm x 301.1 mm
Pixel Pitch	0.294 mm x 0.294 mm
Native Resolution	1280 x 1024 Pixels
Back Light	50,000 Hours Typical
Viewing Angle (h/v)	140°/130°
Contrast Ratio	600:1 Typical
Brightness (typ)	250 cd/m2
Response Time (typ)	12 mSec Typical
Colors	16.2 Million – (6 Bits + FRC)
Supported Video Formats - Standard	640 x 400 @ 85Hz 640 x 480 @ 60/72/75/85Hz 720 x 400 @ 70/85Hz 800 x 600 @ 56/60/72/75/85Hz 1024 x 768 @ 60/70/75/85Hz - Native Resolution Optional - EGA; CGA; MDA; TTL Video Timings (1); (*2) Optional - Legacy Products Timings - Horizontal: 15 to 68KHz; Vertical 50 to 85Hz (*1)
Input Signals	Standard - Analog Video: 0.7Vpp @ 75 Ohms Standard Sync: Separate or Composite TTL Level Sync Optional - Sync on Green Video (Positive) 0.7Vpp-Sync (negative) 0.3Vpp (*1) Optional - TTL Video Input for EGA, CGA and MDA (*2) Optional - RCA (NTSC/PAL) and 5 Pin Mini-DIN (S-video)
Input Interface	HD15 (VGA Analog) - DVI-D
External Connectors	Analog HD15 D-Sub Input; Digital DVI Input:: DC Input.
Power Requirements	100-240VAC 50-60Hz or +12VDC @ 4A
Approvals	FCC, CE, UL
Temperature: Operating **Temperature: Storage**	0° to 50°C @ 10-90% R.H. -20° to 60°C @ 10-90% R.H
Altitude: Operating **Altitude: Storage**	0 to 10,000 ft 0 to 40,000 ft
Mechanical Configurations	Tabletop or Desktop enclosure with Tilt & Swivel; Open Frame; NEMA 4/12 Panel Mount : [Recommended Cutout: 12.2" (H) x 15.06" (W)] Rackmount; EIA RS310 D – 7 Unit Wall/Arm Mount
Dimensions	Tabletop - 16" (H) x 17" (W) x 2.5" (D) or 6" (D) with Tilt & Swivel; Panelmount - Rackmount - 15.72" (H) x 19.0" (W) x 3.5" (D) Wall/Arm Mount - 14.11" (H) x 17.03" (W) x 3.84" (D)
Weight	20 Lb.
Warranty	One Year Limited Warranty
Options	Universal Video Input Option (*1) Touch Screen: Resistive, Capacitive and SAW; Screen Protection from Impact - Strengthened Glass; Sunlight Readable; Optional RCA (NTSC/PAL) and 5 Pin Mini Din (S-video); TTL Video Input for EGA, CGA and MDA (*1); (*2); Universal Video Input - 3/4/5 BNC Input (RGB) (*1) Page/Portrait format

Note (1) – With Universal Video Input Option.

Note (2) – With TTL Video Input Option.

CLEANING INSTRUCTIONS

1. Gently wipe the screen with a clean, soft, lens brush or a soft clean, lint-free cloth. This removes dust and other particles that can scratch the screen.
2. Do not apply pressure to the screen surface when wiping it clean.
3. Do not pour or spray any liquid directly onto the screen or case of the LCD monitor. Chemical cleaners may damage the screen or the LCD monitor.

TROUBLESHOOTING

- **LCD Pixel Statement** - The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as black or colored dots. This has no effect on the recorded image and does not constitute a malfunction.
- **There is no picture on the screen**.

  Please check the color of the LED indicator on the LCD monitor.

  1. "**GREEN**": During normal operation the LED light will be green. If it is green and there is no picture contact the customer service line.
  2. "**ORANGE**": please check the connection of the VGA cable to the monitor and the connection to the computer.
  3. "**NO POWER**": Make sure the power cord is securely connected to the adapter and the light on the Adapter is green.
- **Missing Colors**
- If any of the red, green, or blue colors are missing, check the signal cable to make sure it is tightened correctly. The pins in the cable could be loose and cause a bad connection.
- **No image**
  1. Make sure power button is ON.
  2. Check whether the LCD monitor and computer power cords are connected and whether there is a supply of power.
- **No Signal Input**

  Check the signal connection between the computer and LCD monitor.
- **Image too bright/Image too dark**

  Adjust brightness and contrast by OSD.
- **Irregular image**
  1. Check the signal connection between the computer and LCD monitor.
  2. Perform Auto Adjust.
- **Distorted image**
- Reset the LCD monitor. (Perform the "Recall" function by OSD)
- **Image is not centered / Size is not appropriate**
  1. Use OSD Image Menu to adjust H. Position and V. Position
  2. Check image size setting.
  3. Perform Auto Adjust.
- **Uneven color / Color too dark / Dark area distorted / White color is not white**

  Use OSD Color Temperature Menu to adjust color setting.
- **No sound**
  1. Check the audio signal cable connection between the computer and LCD monitor.
  2. Try pressing the "+MUTE" button to disable the volume Mute function.